

UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MICHIGAN  
SOUTHERN DIVISION

FILED

2004 OCT 27 P 5 1b

AUTOMOTIVE TECHNOLOGIES  
INTERNATIONAL,

Plaintiff,

Case No. 01-CV-71700-DT

v.

BMW OF NORTH AMERICA, INC., et al.,

Defendants.

F I L E D  
OCT 27 2004  
CLERK'S OFFICE  
DETROIT

**ORDER DENYING DEFENDANTS CALSONIC KANSEI CORPORATION AND  
NISSAN NORTH AMERICA, INCORPORATED'S  
"MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT"**

Pending before the court is Defendants Calsonic Kansei Corporation ("CK") and Nissan North America, Inc.'s ("Nissan's") motion for summary judgment of non-infringement regarding Plaintiff's patent infringement claims. This motion has been fully briefed by the parties and the court conducted a hearing on this matter September 29, 2004. For the reasons set forth below, the court will deny Defendants' motion.

**I. BACKGROUND**

This is a patent infringement case filed by Plaintiff. Plaintiff has sued Defendants CK and Nissan for infringement of United States Patent No. 5,231,253 ("the '253 Patent") based on Defendants' manufacture and use of side impact sensors for detecting acceleration forces in automobile air bag safety devices or systems. The '253 Patent is titled "Side Impact Sensors" and claims certain sensors designed to be used for side impact sensing and initiating a vehicle's occupant protection apparatus (e.g. air bags). The court entered a claim construction order regarding the '253 Patent on March 31, 2004 and Defendants now bring their current motion arguing that they are

entitled to summary judgment on Plaintiff's infringement claims. Claims 1, 20, 29, and 30 constitute the asserted independent claims allegedly infringed under Plaintiff's '253 Patent. The parties agree that these four claims constitute the only independent claims asserted.

The basis for Defendants' motion relates to means-plus-function claim language found in these four independent claims. See 35 U.S.C. § 112 ¶6 ("An element in a claim . . . may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."). The means-plus-function language at issue requires a "means for mounting [the sensor 'housing' (claims 1, 20, and 30) or 'discriminating sensor and safing sensor' (claim 29)] onto at least one of a side door of the vehicle *and* a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle." ('253 Patent at Claims 1(d), 20(e), 29(c), and 30(d) (emphasis added).).<sup>1</sup>

<sup>1</sup> The claim language at issue includes the following:

(1) a sensor housing described in claim 1 with a "means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle," ('253 Patent at claim 1(d));

(2) a side-impact sensor described in claim 20 including a housing with a "means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle; whereby said sensor responds to a designed velocity change function in a side impact crash," (*Id.* at claim 20(e));

In its March 31, 2004 claim construction, the court construed "means for mounting . . . onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels" to require that the single sensor housing described in the claims (or sensor in claim 29) "be capable of being mounted" at both locations, that is onto at least one of the vehicle's side doors and onto a side of the vehicle. (03/31/04 Order at 7, 24-31.) In other words, the sensor or housing described in the '253 Patent at claims 1, 20, 29, and 30 must have means for mounting the sensor at both locations. As the court noted, "[t]he use of the conjunctive language [in the claims] suggests that the sensor not only could be mounted, but also *must* be capable of being mounted at both locations. It does not, however, require the housing to be mounted at both locations." (*Id.* at 26.)

Defendants CK and Nissan argue that none of their sensors are "capable of being mounted" on a side door of their vehicles without modifying the alleged infringing sensor or the Nissan vehicle doors. As such, Defendants claim that the sensors made by CK and used in Nissan vehicles cannot infringe the '253 Patent's independent claims as a matter of law. Conversely, Plaintiff argues that Nissan's proffered evidence

(3) a side impact sensor system for a vehicle having front and rear wheels, with at least one safing and one discriminating sensor having a "means for mounting said discriminating sensor and said safing sensor onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle," (*Id.* at claim 29(c)); and

(4) a side impact crash sensor with a housing and a "means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle." (*Id.* at 30(d).)

does not indicate that its sensors are not "capable" of being mounted on a side door of Nissan's vehicles and that Defendants merely present evidence that shows Nissan does not actually mount sensors on the side doors of its vehicles. Plaintiff argues that Nissan's choice to mount sensors only on the "B-pillar"<sup>2</sup> between the side doors of its vehicles does not render the accused devices incapable of being mounted onto the door. In other words, Plaintiff claims that, notwithstanding Defendants design choice to mount the sensors onto the B-pillar and not the doors, the CK sensors still have a *means* for mounting on the door *and* the side of the vehicle (where they are in fact mounted). Plaintiff relies on an affidavit from its expert witness Dr. Rollin C. Dix in which he claims, based on his review of Nissan vehicle door drawings, that Defendants' sensors are "capable of being mounted" in a side door of a Nissan vehicle without modifying the sensor or the vehicle door. Dr. Dix also states that he has in fact mounted a CK sensor in the door of a year 2000 Nissan Altima, further demonstrating that the sensors involved are capable of being mounted inside a Nissan vehicle's door.

## II. STANDARD

Under Federal Rule of Civil Procedure 56, summary judgment is proper when there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). "Where the moving party has carried its burden of showing that the pleadings, depositions, answers to interrogatories, admissions and affidavits in the record construed favorably to the non-moving party, do not raise a genuine issue of material fact for trial, entry of summary

<sup>2</sup> The term "B-pillar" generally refers to the structure between the front and rear doors of the vehicle. It often refers to the side or door posts that connect the sills and the roof and provide roof support on an automobile or other vehicle.

judgment is appropriate." *Gutierrez v. Lynch*, 826 F.2d 1534, 1536 (6th Cir. 1987) (citing *Celotex Corp. v. Catrett*, 477 U.S. 317 (1986)).

Summary judgment is not appropriate when "the evidence presents a sufficient disagreement to require submission to a jury." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 251-52 (1986); *Searfoss v. Pioneer Consol. Corp.*, 374 F.3d 1142, 1148 (Fed. Cir. 2004). The existence of some factual dispute, however, does not defeat a properly supported motion for summary judgment; the disputed factual issue must be material. See *Anderson*, 477 U.S. at 252 ("The judge's inquiry, therefore, unavoidably asks whether reasonable jurors could find by a preponderance of the evidence that the plaintiff is entitled to a verdict--whether there is [evidence] upon which a jury can properly proceed to find a verdict for the party producing it, upon whom the *onus of proof* is imposed."). A fact is "material" for purposes of summary judgment when proof of that fact would have the effect of establishing or refuting an essential element of the claim or a defense advanced by either party. *Kendall v. Hoover Co.*, 751 F.2d 171, 174 (6th Cir. 1984).

In considering a motion for summary judgment, the court must view the facts and draw all reasonable inferences from those facts in a manner most favorable to the nonmoving party. *Striker Corp. v. Davol Inc.*, 234 F.3d 1252, 1257 (Fed. Cir. 2000); *Wexler v. White's Furniture, Inc.*, 317 F.3d 564, 570 (6th Cir. 2003) (citing *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986)). The court is not to weigh the evidence to determine the truth of the matter, but must determine if there is a genuine issue for trial. *Sagan v. United States*, 342 F.3d 493, 497 (6th Cir. 2003). The burden falls on the moving party to conclusively show that no genuine issue of material

fact exists and that he is entitled to judgment as a matter of law. *Wilkins v. Jakeway*, 183 F.3d 528, 532 (6th Cir. 1999).

The district court will grant summary judgment on a claim of non-infringement only if, "after viewing the alleged facts in the light most favorable to the non-movant, there is no genuine issue whether the accused device is encompassed by the claims." *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1304 (Fed. Cir. 1999). Whether a particular device infringes a properly construed claim generally presents a question of fact. See *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998). "As such, it is amenable to summary judgment where . . . no reasonable fact finder could find infringement." *Id.* (citing *Warner-Jenkinson, Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997)); see also *Southwall Tech., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed. Cir. 1995).

### **III. DISCUSSION**

#### **A. Literal Infringement and The Doctrine of Equivalents**

The patent holder has the burden of proof to establish infringement. See, e.g., *Linear Technology Corp. v. Impala Linear Corp.*, 379 F.3d 1311, 1325 -26 (Fed. Cir. 2004) ("Because [patent holder] bears the burden of establishing infringement at trial, in moving for summary judgment [the defendant] need only establish a deficiency concerning an element of [patent holder's] infringement claim."); *Rohm & Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092 (Fed. Cir. 1997).

"Analysis of infringement involves two steps." *Searfoss*, 374 F.3d at 1148. First, the district court construes the claims of the patent, determining their scope and meaning. *Id.*; *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372-74. Second,

the claims, as construed by the court in step one, are compared limitation by limitation to the features of the allegedly infringing device. *Johnson v. Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 988 (Fed. Cir. 1999). The court has accomplished step one in its March 31, 2004 claim construction order.

Literal infringement occurs only if each limitation of the claim is present in the accused device. *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1330 (Fed. Cir. 2001); *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1389 (Fed. Cir. 1992). Any deviation from the claim precludes a finding that the accused device infringes. *Telemac*, 247 F.3d at 1330 (citing *Cole v. Kimberly-Clark Corp.*, 102 F.3d 524, 532 (Fed. Cir. 1996)).

In addition, “[e]ven where an accused device falls outside the literal bounds of a claim, it may still infringe under the doctrine of equivalents if every claim element is literally or equivalently present in the accused device.” *Sage v. Devon Industries, Inc.*, 126 F.3d 1420, 1429 (Fed. Cir. 1997). The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes. *Festo Corp.*, 535 U.S. 722 (2002). Under the doctrine of equivalents, “[a]n element in the accused product is equivalent to a claim limitation if the differences between the two are ‘insubstantial’ to one of ordinary skill in the art.” *Eagle Comtromics, Inc. v. Arrow Communication Laboratories, Inc.* 305 F.3d 1303, 1315 (Fed Cir. 2002). Infringement under the doctrine of equivalents, however, “requires that the accused product contain each limitation of the claim or its equivalent.” *Eagle Comtromics*, 305 F.3d at 1315 (citing *Warner-Jenkinson*, 520 U.S. at 40).

"[I]n every infringement analysis, the language of the claims, as well as the nature of the accused product, dictates whether an infringement has occurred."

*Fantasy Sports Props., Inc. v. Sportsline.com, Inc.*, 287 F.3d 1108, 1118 (Fed. Cir. 2002). Further, under Federal Circuit precedent, "that a device is capable of being modified to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement." *Telemac*, 247 F.3d at 1330 (citing *High Tech Med. Instrumentation v. New Image Indus., Inc.*, 49 F.3d 1551, 1556 (Fed. Cir. 1995) ("[A] device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim.")); see also *Stryker Corp. v. Davol, Inc.*, 10 F. Supp. 2d 841, 844 (W.D. Mich. 1998), aff'd, 234 F.3d 1252, 1257 (6th Cir. 2000).

Defendants argue that there is no literal infringement or infringement under the doctrine of equivalents because CK's sensors cannot satisfy the "means for mounting" claim limitations found in claims 1, 20, 29, and 30 of the '253 Patent. Defendants claim that none of the accused devices are "capable of being mounted" onto a side door of any Nissan vehicle because the sensors--as designed, sold, and intended for use--are not mounted onto a vehicle door. Defendants further argue that Dr. Dix modified the vehicle door and sensor in order to mount one of CK's sensors onto the side door of a year 2000 Altima.

Defendants rely on three factual propositions to support their argument: (1) that there is no mounting structure in any side door of any Nissan vehicle that can mount a CK sensor; (2) that Defendants never intended that any CK sensor be mounted in a vehicle side door; and (3) any attempt to mount a CK sensor in a door requires modification of the door and the sensor.

## B. Defendants' Sensors

Defendant CK manufactures impact sensors used for detecting acceleration forces and supplies those sensors only to Nissan for use in air bag systems. (Yajima Decl. at 2.) The only customers for CK sensors from 1999 to the present are Nissan and its subsidiaries. (*Id.*) Each of the accused devices (the CK sensors) has a mounting flange with a pair of holes. (See Def.'s Mot. Br. at 3-5.) The CK sensors are designed to attach to mounting surfaces on rigid vehicle body structures of Nissan vehicles, positioned in such a manner to sense a side impact.

The relevant CK sensors at issue are called "side airbag satellite sensors." (Bunce Dep. at 16.) These sensors generally include a connector which interfaces with the vehicle's main harness connector, a housing, and a mounting flange with two holes. (*Id.* 16-17; see Pl.'s Resp. at 4.) The housing contains a circuit board with an accelerometer. (Bunce Dep. at 17-18, 36.) The mounting flange and holes permit Nissan to mount the sensor. Nissan "uses studs, nuts, bolts or some combination thereof to mount the CK sensors," but does not use sheet metal screws. (Bunce Supplemental Decl. at ¶ 5.) The CK sensors come in pairs that are meant to be mounted on opposite sides of vehicle and are actually mounted inside the B-pillar of a vehicle with the flat (rear) surface of the sensor and its housing fitting into a space within the pillar space. (Bunce Dep. at 43-44.)

Nissan mounts each CK sensor in a manner so that they are capable of being tightened to meet minimum torque and other layout requirements set forth in the Nissan Engineering Manual KD1-98505. (See Def.'s Reply at Ex. B.) The manual does not

discuss whether Nissan engineers must design a sensor to fit into specific locations, rather it directs that the sensor be located in a zone which expressly includes areas of both side doors. (See Bunce Dep. at 75-78.) According to Bunce, the sensor should be mounted in a relatively flat area of about 5 millimeters greater in size than the flat flange diameter of the sensor. (See *id.* at 77-78.) The Nissan engineering manual does not forbid the mounting of CK sensors in a vehicle door. (*Id.* at 81.) Bunce also testified that Nissan has not completed a study to determine if the CK sensors could fit into a vehicle door. (*Id.* at 89-90.)

There are three ways the CK sensors are mounted. First, the mounting surface on the vehicle body may include threaded studs anchored to the vehicle that are passed through the sensor's flange holes. Nuts are then attached to the studs to secure the sensor against the mounting surface and the vehicle body. This first means for mounting is typically done in the B-pillar of a Nissan vehicle. (*Id.* at 3.) Second, the mounting surface on the vehicle body may include threaded holes. To secure the sensor to the vehicle, Nissan inserts bolts through the flange holes on the sensor's housing and the bolts are then tightened into the threaded holes in the mounting surface on the vehicle's body. (*Id.* at 4.) Third, the mounting surface on the vehicle body may include one threaded hole and one clamping stud. In this case, the threaded hole receives a bolt that passes through one of the sensor's flange holes and the clamping stud passes through the other mounting flange hole.

None of these three mounting arrangements are actually used inside a Nissan vehicle door because Nissan has not designed air bag systems for its vehicles with sensors located inside the door. (See Bunce Decl. at ¶¶ 14-18, Def.'s Mot., Br. at Ex.

C.) According to Nissan, there are several technical reasons for not mounting sensors inside or on the side doors of its vehicles. Defendants also note that Nissan's side air bag systems would have to be modified and undergo an engineering design review and significant testing to determine whether such a mounting location would be feasible. (*Id.* at ¶¶ 18-19.)

### **C. Claim Construction**

The court has held that the means for mounting claim limitations are written in means-plus-function format. (See 03/31/04 Order at 7, 11, 12, 22 & 36.) The parties agreed and the court found the stated function to be "mounting said [sensor] housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels." (*Id.* at 22.) The court's claim construction also identified corresponding structure for the mounting function, including a pair of flanges with openings to receive a fastener for mounting ad depicted in Figures 1, 2, 5, 6, 7, and 11 of the '253 Patent specification. (*Id.*)

There is no dispute that each of the CK sensors at issue has a mounting flange with a pair of holes and Defendants acknowledge that the function of the flanges is to facilitate mounting the sensors to the side of a Nissan vehicle, but not to a side door. Currently, there is no dispute that the CK sensors have a means for mounting the sensor on the B-pillars of Nissan vehicles as described in the '253 patent. Instead, the parties' dispute turns on the impact of the court's construction of the phrase "onto at least one of a side of a door of the vehicle and a side of the vehicle between the centers of the front and rear wheels . . ."

The court has construed this language to require that the sensor housing (or sensor) be capable of being mounted at both locations. In other words, the device must include a means for mounting that would enable the sensor to be mounted on the side door and the side of the vehicle. The court emphasized that actual mounting of a sensor onto a side door is not required. (03/31/04 Order at 24, 29.) The court specifically rejected Defendants' argument that the language required at least one sensor to be mounted on a side door of the vehicle. (*Id.* at 24, 29-31.)

As the court ruled in its claim construction, the above-quoted claim is a dependent clause modifying the means for mounting a single sensor and the means for mounting limitation under the claims must be capable of being used to mount the sensor at both locations. The court recognizes that sensors mounted on a "side door" are also mounted on a "side" of the vehicle but has previously held that the means for mounting limitation does not require that the a single sensor is always mounted in both locations. (*Id.* at 26.)

Defendants do not dispute that the CK sensors have a means for mounting onto a side of Nissan's vehicles as described in the '253 Patent claims. There is no factual dispute that the CK sensors have the required means for mounting the sensor to a side of the vehicle because the CK sensors are in fact mounted onto the side of Nissan vehicles by way of the B-pillar between the side doors in Nissan vehicles.

The question for the court is whether CK's sensors have a means for mounting which is also *capable* of being used to mount the sensors in a side door of a Nissan vehicle. Contrary to Defendants' contention, whether the CK sensors are in fact mounted in a vehicle side door, whether Defendants ever intended that such sensors

would be mounted in the door, and the degree and scope of necessary system engineering modifications and testing that would be associated with changing the mounting locations for sensors in Nissan vehicles, are not relevant in determining whether the means for mounting the CK sensors also provides a means capable of mounting such sensors in the vehicle doors. As explained in the court's claim construction, the sensors need not be mounted on the door but the *means* for mounting employed in the accused device must also be capable of mounting the sensors in such a location.

#### **D. A Triable Issue of Fact Remains**

The court agrees with Plaintiff that the record provides evidence which establishes a triable issue of material fact as to whether Defendants' sensors are capable of being mounted into a Nissan vehicle's side door. Plaintiff presents testimony from its expert Dr. Dix in support of its claim.

According to Dix, he examined the door drawings supplied by Defendants, the accused CK sensors, and an actual side door from a 2000 Nissan Altima and an actual side door from a late model Nissan Pathfinder. (*Dix Decl.* at ¶ 4.) Dix opines that "the CK sensors are in fact capable of being mounted onto a side door" in a position and direction as to sense a side impact. (*Id.* at ¶¶ 7, 8.) He bases his opinion on his review of Nissan vehicle door drawings, his inspection of the sensors, and the actual vehicle side doors. He claims that each drawing shows locations on each of the vehicle doors where an accused CK sensor can be mounted in a position and a direction as to sense a side impact. (*Id.* at ¶ 8.)

Dr. Dix also states that he obtained a side door from a 2000 Altima and confirmed that the sensor had a means for mounting capable of being used to mount a CK sensor onto the door of the Altima without modifying the sensor or the door. (*Id.* at ¶ 9.) Dix mounted the CK sensor using sheet metal screws and states that the sensor fit into the door without interfering with the interior trim panel or any other component of the door. (*Id.*) He states that, although he elected to use screws to mount the sensor by using its flange holes, "one of ordinary skill in the art would know that bolts, studs, and/or rivets could be used" and that the sensor could also be mounted onto the door using a commercially available adhesive. (*Id.*) Dix also states that the sensor he used includes a wiring harness that could be located within the door cavity that could be used to allow electronic communications to and from the sensor. (*Id.* at ¶ 10.) Lastly, Dix claims that his inspection of an actual side door from a Nissan Pathfinder shows that a sensor can also be mounted onto the Pathfinder door at the same location as in the Altima door. (*Id.* at ¶ 11.)

Plaintiff maintains that his evidence establishes, or at least creates an issue of fact, as to whether the means for mounting the CK sensors are capable of mounting the sensors on a Nissan vehicle side door. Despite Defendants' arguments that Dix modified the vehicle door and the sensor, the court agrees that a reasonable jury could find that the *means for mounting* employed by the CK sensors includes the capability of mounting the sensors on a side door of a Nissan vehicle in such a position and direction as to sense a side impact.

Defendants argue that to be "capable" of being mounted in a vehicle door, it is necessary that a sensor housing, or sensor in the case of claim 29, be mountable in a

door in a position and direction to sense an impact into the side of the vehicle without modifying either the sensor or the door. The court agrees that a sensor housing or sensor is not "capable" of being mounted in a vehicle door if the sensor or housing itself must be modified. However, if the sensor contains a means for mounting the housing or the sensor onto a side door in a position and direction to sense a side impact, it satisfies the claim limitation. The sensor need not actually be placed onto both a side and a side door; nor need it actually sense a side impact from both mounting locations. The focus of the inquiry is on the '253 claim language describing the sensor or housing and the device's means for mounting. *Fantasy Sports Props., Inc.*, 287 F.3d at 1118 ("in every infringement analysis, the language of the claims, as well as the nature of the accused product, dictates whether an infringement has occurred"). Thus, any *required* modification in the accused device itself necessary for mounting a sensor onto a side door would potentially render the means for mounting in the accused device incapable of mounting the sensor at either locations (i.e. the side and side door). See *Telemac*, 247 F.3d at 1330 ("that a device is capable of being modified to operate in an infringing manner is not sufficient, by itself, to support a finding of infringement").

On the other hand, modification to the door, which is a mounting surface not described in the claim language, is not relevant because each sensor device claimed in the '253 Patent includes a sensor with a means for mounting that sensor. In fact, a vehicle door would almost always have to be modified in some minor way if the accused device (as the CK sensors in this case) were not actually mounted inside the door. It is unlikely, if not guaranteed, that a vehicle manufacturer would not design and implement structures for the mounting of sensors in places where it does not intend to

mount them. The court rejected the notion that a single sensor or housing described in the '253 Patent must in fact be mounted on a side door of a vehicle.

The court's focus is necessarily on the accused sensor device, more importantly, on its housing and the sensor's means for mounting, and not on a mounting surface that is not part of the independent claims in the '253 patent. *See High Tech Med. Instrumentation*, 49 F.3d at 1555 ("a device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim"). Here, the focus is on whether the CK sensor device itself has to be modified to satisfy the claim limitations or whether the device's means for mounting is capable of providing a means for mounting the sensor onto a side door. That there are no holes or other structure on Nissan's vehicle doors that permit Nissan to mount the CK sensors in a side door reflects nothing more than a design choice by Nissan. It does not render the means for mounting actually employed in the accused sensors incapable of being supported by a mounting on the side door of a vehicle. The court agrees with Plaintiff's statement that "Claim 1 claims a sensor housing, not a door, and describes structures and a purpose for the structures," and "the proper inquiry begins and ends with an examination of the accused *sensor housing*, and *not* the modification of a door [because] the door is not a limitation of the claim." (Pl.'s Resp. at 13.) Therefore, "modification" of the vehicle door, as was done by Dr. Dix when he used the CK sensor's "means for mounting" to mount a CK sensor to the side door a Nissan vehicle, does not establish that the CK sensors are not capable of being mounted onto a side door. (See Rollin Dep. at 43-48.)

Examining Federal Circuit precedent supports the court's reasoning and conclusions. See *Fantasy Sports Props., Inc.*, 287 F.3d at 1117-18; *Telemac*, 247 F.3d at 1330; *Stryker Corp.*, 234 F.3d at 1257 (affirming *Stryker*, 10 F. Supp. 2d at 844-45).

*Fantasy Sports* involved a patent for a computer fantasy football game. The patent infringement claims concerned the only independent claim in the disputed patent and included, "[a] computer for playing football based upon actual football games, comprising means . . . wherein said players in said and second groups receive bonus points." *Fantasy Sports*, 287 F.3d at 1111. The claim interpretation dispute centered on the "bonus points" limitation. *Id.* at 1112. The assignee of the patent filed suit against several sports cable television networks and two Internet websites including SportsLine.com Inc., claiming patent infringement. The district court granted summary judgment for non-infringement with respect to one of SportsLine.com's products, its "Commissioner.com" product.

The plaintiff argued that SportsLine.com's product infringed because it was capable of being configured to award bonus points. The plaintiff relied on one of its product specialist's testimony that he was able to customize the "Commissioner.com" fantasy football game to include essentially the same means for scoring (including bonus scoring) described in the plaintiff's patent. *Id.* at 1117. SportsLine.com argued that its product did not infringe because it was only a modifiable software tool that enabled subscribers to operate their own fantasy football leagues. *Id.* The district court granted summary judgment in favor of SportsLine.com and the plaintiff appealed.

The Federal Circuit concluded that the district court erred in granting summary judgment with respect to SportsLine.com's product because genuine issues of material

fact existed under a direct infringement analysis. *Id.* The court disagreed that *Intel Corp. v. ITC*, 946 F.2d 821 (Fed. Cir. 1991) stood for the proposition that infringement is established when a device is capable of being altered in an infringing manner, noting that "as in every infringement analysis, the language of the claims, as well as the nature of the accused product, dictates whether an infringement has occurred." *Id.* at 1118. The court reversed the grant of summary judgment with respect to the Commissioner.com product reasoning as follows:

In the present case, claim 1 is directed to "[a] computer for playing football," and thus the claims of the '603 patent read on a computer executing fantasy football game software. Claim 1 also sets forth a number of functionally defined means that that software must contain, including a "means for scoring . . . bonus points" for unusual scoring plays. Software is a set of instructions, known as code, that directs a computer to perform specified functions or operations. Thus, the software underlying a computer program that presents a user with the ability to select among a number of different options must be written in such a way as to enable the computer to carry out the functions defined by those options when they are selected by the user. Therefore, although a user must activate the functions programmed into a piece of software by selecting those options, the user is only activating means that are *already present in the underlying software*. Otherwise, the user would be required to alter the code to enable the computer to carry out those functions. Accordingly, in order to infringe the '603 patent, the code underlying an accused fantasy football game must be written in such a way as to enable a user of that software to utilize the function of awarding bonus points for unusual plays such as out-of-position scoring, without having to modify that code. In other words, an infringing software must include the "means for scoring . . . bonus points" regardless whether that means is activated or utilized in any way.

*Id.*

In the instant case, the means for mounting CK's sensors, like the programmed functions in the Commissioner.com software, are present in the underlying accused device. In *Fantasy Sports*, the court noted that infringing underlying software code had to be written in a way to enable an end user to implement the infringing "bonus points"

function. Similarly, the means for mounting CK's sensors may infringe if they provide a means for mounting the accused device in a side door, "regardless whether that means is activated or utilized" by Nissan. See *id.*

Next, in *Telecom Cellular Corporation v. Topp Telecom Inc.*, the Federal Circuit affirmed a district court's conclusion that the plaintiff's allegations of literal infringement failed. *Telecom*, 247 F.3d at 1330. *Telecom* involved a patent for a mobile cellular telephone system that had a host processor and internal accounting capabilities for performing real-time call debiting. Telemac sought to provide a cellular phone that automatically debited the cost of each call from an available credit account stored in the cellular phone to minimize credit risk in the rental cellular telephone market. *Id.* at 1319. The patented debit phone differs from conventional cell phones in that a user must pre-pay for calls or air time. *Id.* at 1320. The accused device/system, TRACFONE, was made by the defendant Topp Telecom. The claim at issue required the accused device to have a "complex billing algorithm" that required calculation of charges using call rates based on classification of calls into local, long distance, international, and roaming call categories. *Id.*

The district court held that the defendant's system "as manufactured and sold, does not allow users to place international calls," and therefore it did not infringe the claim. *Id.* The Federal Circuit affirmed. It noted, "[i]n this case, due to a restriction built into the software program stored in the telephone's memory, a user of Topp's system is prevented from directly placing international calls. Therefore international rates, and the calculation of charges for such calls, are not included in the billing algorithm of the accused device." *Id.*

Unlike the accused device in *Telecom*, the CK sensors include a means for mounting the sensor housing or sensor to the side of a vehicle and potentially to a side door of a vehicle. Also, unlike the system found not to be infringing in *Telecom*, there is nothing in the accused device itself that restricts where the means for mounting may be employed. Although modifications of the door and the system would be inevitable if Nissan chose to mount a sensor on a vehicle door and make it function to its engineering and design specifications (see Bunce Supp. Decl. at ¶¶ 9-13), nothing in the means of the device forecloses a finding that if the CK sensors are capable of being mounted on a side door of a Nissan vehicle in a position and direction as to sense a side impact.

Lastly, Defendants rely on *Stryker Corp. v. Davol Inc.*, 10 F. Supp. 2d 841 (W.D. Mich), *aff'd*, 234 F.3d 1252 (6th Cir. 2001). *Stryker* was a patent infringement case concerning certain handheld surgical devices. The defendant Davol Inc. alleged that Stryker, a Michigan manufacturer of medical devices, infringed on two of its patents. Davol alleged that Stryker made a surgical irrigation hand piece and adaptor that infringed its patents. The independent claim at issue described "a disposable irrigation control valve assembly, comprising: a common conduit . . . having means for attaching a surgical probe permitting said simultaneous suction and irrigation." *Id.* at 842.

Stryker Corp., focusing on the last terms in the claim language above, contended that it did not manufacture, use, or sell any control valve assembly in an hourglass shape (as required by the patent) or that permitted simultaneous irrigation and suction at a surgical site. *Id.* at 843, 844.

The district court agreed that Stryker's surgical irrigation hand piece, the accused device, did not infringe on the independent patent claim because it lacked the capability for simultaneous suction and irrigation. *Id.* at 844. Stryker maintained that it never manufactured, used or sold a surgical probe that could be attached to its handheld control valve so as to permit simultaneous suction and irrigation at the site. *Id.* Although Stryker admitted that it made an adaptor that allowed attachment of a Davol Inc. surgical probe to its control valve, it still did not permit simultaneous functioning when attached to the accused device without modification of the accused device. *Id.*

The district court stated:

Yet, though the Davol probe allows simultaneous functioning when attached to a Davol hand piece, it does not allow simultaneous functioning when attached to the Stryker hand piece, without modification of the probe. As to this critical fact, there is no dispute. Where the Stryker hand piece can be made to practically allow for simultaneous functioning only by fitting it with a nonexistent, but hypothetical, modified probe, Stryker argues its product cannot, as a matter of law, be deemed to infringe all limitations of claim 1.

The Court agrees. As observed by the Federal Circuit, "a device does not infringe simply because it is possible to alter it in a way that would satisfy all the limitations of a patent claim." *High Tech Med. Instrumentation v. New Image Ind., Inc.*, 49 F.3d 1551, 1555 (Fed. Cir. 1995).

Davol argues the Stryker handpiece could be made to permit simultaneous functioning even without altering it, if it were attached to an appropriately designed, newly fabricated probe or to an easily modified existing probe. Yet, significantly, Davol concedes no such probe now exists.

This is the crux of the matter. The outcome would be different if such a probe existed, and the Stryker handpiece were manufactured with knowledge of the existence of such a probe and with capability for attachment thereof. Cf., *id.*, at 1556 (if a device is designed to be altered or assembled before operation, manufacturer may be liable for infringement if device, as altered or assembled, infringes a valid patent); *Intel Corp. v. United States Int'l Trade Comm'n*, 946 F.2d 821, 832 (Fed. Cir. 1991) (device programmable, as made and sold, to perform patented function, deemed presently capable and therefore infringing); *Cyrix Corp.*

*v. Intel Corp.*, 846 F. Supp. 522, 536 (E.D.Tex.1994), *aff'd*, 42 F.3d 1411, 1994 WL 685455 (Fed. Cir. 1994) (to infringe, accused device must have presently existing capability of functioning as described by claim). *On the present record, however, it is undisputed that the particular probe necessary to enable the Stryker handpiece to provide simultaneous functioning does not exist. In other words, there is no evidence that the accused handpiece is presently capable of permitting simultaneous suction and irrigation.* In the words of the claim 1 limitation, there is no evidence that the accused handpiece includes "a common conduit having means for attaching a surgical probe permitting simultaneous suction and irrigation." There being no evidence that this means plus function limitation is met, there is no genuine issue of material fact and Stryker is entitled to summary judgment declaring as a matter of law that its accused handpiece does not infringe claims 1, 3, 5 and 9 of the 145 patent.

*Id.* at 844-45 (emphasis added) (internal citations omitted).

In *Stryker*, the accused device did not include a probe that allowed for simultaneous functioning and therefore the court found that no infringement was possible. *Id.* The court specifically noted that there was a lack of evidence that the accused device was capable of accomplishing the simultaneous functions of suction and irrigation. *Id.*; *Stryker*, 234 F.3d at 1257. Here, Defendants do not claim a lack of evidence that the CK sensors (the accused devices) are capable of sensing a side impact. There is no dispute that the sensors used on the B-pillars perform the function of sensing a side impact. The device in *Stryker* could infringe by permitting simultaneous suction and irrigation only if it could be fitted "with a nonexistent, but hypothetical modified probe." *Id.* at 844. Here, the CK sensors mounted on the B-pillar of Nissan's vehicles are not hypothetical, they are mounted on a side of the vehicle, they sense side impacts, and they may infringe if their means for mounting also includes the capability of mounting the sensors to the side door of a vehicle (even though the sensors are not in fact mounted onto a side door). The fact that "no unmodified door exists to which a CK sensor can be mounted to sense an impact into

the side of the vehicle," (Defs.' Reply at 5), does not foreclose infringement because CK sensors are mounted on the side of Nissan vehicles and they may also have a means for mounting capable of mounting them on the side doors of Nissan vehicles in a position and direction such as to sense a side impact.

During the hearing, counsel for Defendants relied on *Stryker* to support its argument that the CK sensors cannot be held to infringe because they are not capable of being mounted on a side door of a Nissan vehicle in such a position and direction as to sense a side impact. The court, however, is not persuaded. Unlike the current '253 Patent side impact sensors, the devices in *Stryker* did not implicate patent language where the device claimed included means for mounting a single sensor in more than one potential location. In *Stryker* the accused device simply could not perform the simultaneous functions of suction and irrigation without a hypothetical probe. Here, the Nissan vehicle's door is not hypothetical and Defendants have not argued that the CK sensors mounted on the "B-pillars" of Nissan Vehicles are not capable of performing the sensing function associated with the means for mounting the sensors described in the '253 patent. In the current context, the CK sensors mounted on the B-Pillar can sense a side-impact without adding a hypothetical device. Again, the court emphasizes that the single sensor described need not actually be mounted or actually sense a side impact from a side and a side door of vehicle.

The more appropriate issue concerns whether the accused device's means for mounting allows for mounting of the CK sensors onto a side door without modifying the sensors. Defendants argue that the record shows that Dr. Dix modified the accused device that he mounted on the door of the 2000 Altima. (Defs.' Reply at 2.)

Defendants claim that "Dix withheld the fact that, in order to fit the sensor into the location he chose, he had to remove a connector ('pony tail') from its mount to move the pony tail out of the way to make room for the preexisting door panel to be reinstated." (*Id.* at 2. (citing Dix Dep. at 54, 67-68.)) Although the testimony cited reflects that Dr. Dix may have attached a right-hand sensor to a left-hand door and needed to remove the ponytail, it does not establish that a left-hand sensor is not capable of being mounted in a left-hand door. There is no evidence that Dr. Dix had to disconnect the ponytail from the sensing mechanism contained in the housing of the CK sensor. The evidence that he removed the ponytail from its mount may weaken the credibility of Dr. Dix's conclusion that the means for mounting CK sensors permit mounting on Nissan vehicle side doors without modification. However, when taking the record evidence in a light most favorable to Plaintiff, an issue of fact remains.

#### IV. CONCLUSION

IT IS ORDERED that Defendants' "Motion for Summary Judgment of Non-Infringement" [Dkt. # 251] is DENIED.




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ROBERT H. CLELAND  
UNITED STATES DISTRICT JUDGE

Dated: October 26, 2004

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